Test Report
Field Density Test by Sand Replacement Method

Project Name	Improvements of roads for layout where the Cauvery and UGD works are in progress in Ward No.05 and Ward No.06 Byatarayanapura Sub Division
Client	Executive Engineer Project Yellahanka Division
Job No	MCTPL/BBMP/Project Division Yelahanka ZONE /P-7/1/2017-2018
Mix Type	Wet Mix Macadam
Contractor	Sri. R. Satheesh
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works,
Location	bay
Material	Wet Mix Macadam
Sample No	7
Date	3-Apr-2018

Test Hole No	7
MDD	2.24
OMC in %	3.20
Bulk Density Ys	1.39
Weight of Sand In cone W1 (gm)	1195.00
Weight Of Wet soil From Hole (W2)	4435.00
Wt Of Sand +Cylinder Before Pouring (W3)gm	17000.00
Wt Of Sand +Cylinder After Pouring (W4) gm	13105.00
Wt Of Sand In Hole: W5 = W3 - W4- W1 (gm)	2700.00
Volume of Hole: V= W5/ Ys	1939.66
Bulk Density Yb= W2/V (gm/cc)	2.29
Moisture Meter Reading (%)	1.58
Moisture Content : w (From Graph In %)	3.33
Dry Density Yd = Yb/(1+W/100)	2.21
Field Compaction(%)	98.79

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report

Field Density Test by Sand Replacement Method

Project Name	Improvements of roads for layout where the Cauvery and UGD works are in progress in Ward No.05 and Ward No.06 Byatarayanapura Sub Division
Client	Executive Engineer Project Yellahanka Division
Job No	MCTPL/BBMP/Project Division Yelahanka ZONE /P-7/1/2017-2018
Mix Type	Wet Mix Macadam
Contractor	Sri. R. Satheesh
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works,
Location	bay
Material	Wet Mix Macadam
Sample No	8
Date	1-Apr-2018

Test Hole No	8
MDD	2.24
OMC in %	3.20
Bulk Density Ys	1.39
Weight of Sand In cone W1 (gm)	1195.00
Weight Of Wet soil From Hole (W2)	4440.00
Wt Of Sand +Cylinder Before Pouring (W3)gm	17000.00
Wt Of Sand +Cylinder After Pouring (W4) gm	13110.00
Wt Of Sand In Hole: W5 = W3 - W4- W1 (gm)	2695.00
Volume of Hole: V= W5/ Ys	1936.06
Bulk Density Yb= W2/V (gm/cc)	2.29
Moisture Meter Reading (%)	1.56
Moisture Content : w (From Graph In %)	3.54
Dry Density Yd = Yb/(1+W/100)	2.21
Field Compaction(%)	98.88

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Test Report

Field Density Test by Sand Replacement Method

Project Name	Improvements of roads for layout where the Cauvery and UGD works are in progress in Ward No.05 and Ward No.06 Byatarayanapura Sub Division
Client	Executive Engineer Project Yellahanka Division
Job No	MCTPL/BBMP/Project Division Yelahanka ZONE /P-7/1/2017-2018
Mix Type	Wet Mix Macadam
Contractor	Sri. R. Sathesh
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works,
Location	hm
Material	Wet Mix Macadam
Sample No	9
Date	1-Apr-2018

Test Hole No	9
MDD	2.24
OMC in %	3.2
Bulk Density Ys	1.392
Weight of Sand in cone W1 (gm)	1195
Weight Of Wet soil From Hole (W2)	4323
W3 Of Sand + Cone before Pouring (W3)gm	17000
W4 Of Sand + Cone after Pouring (W4) gm	13176
W5 Of Sand in Hole W5 = W3 – W4- W1 (gm)	2629
Volume of Hole V= W5/ Ys	1888.6
Bulk Density Yb= W2/V (gm/cc)	2.29
Moisture Meter Reading (%)	1.58
Moisture Content w (From Graph In %)	3.28
Dry Density Yd = Yb/(1+W/100)	2.216244421
Field Compaction(%)	98.9394831

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Test Report
Field Density Test by Sand Replacement Method

Project Name	Improvements of roads for layout where the Cauvery and UGD works are in progress in Ward No.05 and Ward No.06 Byatarayanapura Sub Division
Client	Executive Engineer Project Yellahanka Division
Job No	MCTPL/BBMP/Project Division Yelahanka ZONE /P-7/1/2017-2018
Mix Type	Wet Mix Macadam
Contractor	Sri. R. Satheesh
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works,
Location	hsr
Material	Wet Mix Macadam
Sample No	10
Date	1-Apr-2018

Test Hole No	10
MDD	2.24
OMC in %	3.20
Bulk Density Ys	1.39
Weight of Sand In cone W1 (gm)	1195.00
Weight Of Wet soil From Hole (W2)	4326.00
Wt Of Sand +Cylinder Before Pouring (W3)gm	17000.00
Wt Of Sand +Cylinder After Pouring (W4) gm	13172.00
Wt Of Sand In Hole: W5 = W3 - W4- W1 (gm)	2633.00
Volume of Hole: V= W5/ Ys	1891.52
Bulk Density: Yb= W2/V (gm/cc)	2.29
Moisture Meter Reading (%)	1.59
Moisture Content : w (From Graph In %)	3.10
Dry Density Yd = Yb/(1+W/100)	2.22
Field Compaction(%)	99.03

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Test Report
Field Density Test by Sand Replacement Method

Project Name	Improvements of roads for layout where the Cauvery and UGD works are in progress in Ward No.05 and Ward No.06 Byatarayanapura Sub Division
Client	Executive Engineer Project Yellahanka Division
Job No	MCTPL/BBMP/Project Division Yelahanka ZONE /P-7/1/2017-2018
Mix Type	Wet Mix Macadam
Contractor	Sri. R. Satheesh
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works,
Location	bay
Material	Wet Mix Macadam
Sample No	11
Date	1-Apr-2018

Test Hole No	**11**
MDD	2.24
OMC in %	3.20
Bulk Density Ys	1.39
Weight of Sand In cone W1 (gm)	1195.00
Weight Of Wet soil From Hole (W2)	4432.00
Wt Of Sand +Cylinder Before Pouring (W3)gm	17000.00
Wt Of Sand +Cylinder After Pouring (W4) gm	13112.00
Wt Of Sand In Hole: W5 = W3 - W4- W1 (gm)	2693.00
Volume of Hole: V= W5/ Ys	1934.63
Bulk Density Yb= W2/V (gm/cc)	2.29
Moisture Meter Reading (%)	1.55
Moisture Content : w (From Graph In %)	3.31
Dry Density Yd = Yb/(1+W/100)	2.22
Field Compaction(%)	98.99

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Test Report

Field Density Test by Sand Replacement Method

Project Name	Improvements of roads for layout where the Cauvery and UGD works are in progress in Ward No.05 and Ward No.06 Byatarayanapura Sub Division
Client	Executive Engineer Project Yellahanka Division
Job No	MCTPL/BBMP/Project Division Yelahanka ZONE /P-7/1/2017-2018
Mix Type	Wet Mix Macadam
Contractor	Sri. R. Satheesh
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works,
Location	bay
Material	Wet Mix Macadam
Sample No	12
Date	1-Apr-2018

Test Hole No	12
MDD	2.24
OMC in %	3.20
Bulk Density Ys	1.39
Weight of Sand In cone W1 (gm)	1195.00
Weight Of Wet soil From Hole (W2)	4436.00
Wt Of Sand +Cylinder Before Pouring (W3)gm	17000.00
Wt Of Sand +Cylinder After Pouring (W4) gm	13114.00
Wt Of Sand In Hole: W5 = W3 - W4- W1 (gm)	2691.00
Volume of Hole: V= W5/ Ys	1933.19
Bulk Density Yb= W2/V (gm/cc)	2.29
Moisture Meter Reading (%)	1.53
Moisture Content : w (From Graph In %)	3.52
Dry Density Yd = Yb/(1+W/100)	2.22
Field Compaction(%)	98.96

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Test Report
Field Density Test by Sand Replacement Method

Project Name	Improvements of roads for layout where the Cauvery and UGD works are in progress in Ward No.05 and Ward No.06 Byatarayanapura Sub Division
Client	Executive Engineer Project Yellahanka Division
Job No	MCTPL/BBMP/Project Division Yelahanka ZONE /P-7/1/2017-2018
Mix Type	Wet Mix Macadam
Contractor	Sri. R. Satheesh
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works,
Location	bay
Material	Wet Mix Macadam
Sample No	13
Date	1-Apr-2018

Test Hole No	13
MDD	2.24
OMC in %	3.20
Bulk Density Ys	1.39
Weight of Sand In cone W1 (gm)	1195.00
Weight Of Wet soil From Hole (W2)	4329.00
Wt Of Sand +Cylinder Before Pouring (W3)gm	17000.00
Wt Of Sand +Cylinder After Pouring (W4) gm	13171.00
Wt Of Sand In Hole: W5 = W3 - W4- W1 (gm)	2634.00
Volume of Hole: V= W5/ Ys	1892.24
Bulk Density Yb= W2/V (gm/cc)	2.29
Moisture Meter Reading (%)	1.60
Moisture Content : w (From Graph In %)	3.29
Dry Density Yd = Yb/(1+W/100)	2.21
Field Compaction(%)	98.88

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Test Report
Field Density Test by Sand Replacement Method

Project Name	Improvements of roads for layout where the Cauvery and UGD works are in progress in Ward No.05 and Ward No.06 Byatarayanapura Sub Division
Client	Executive Engineer Project Yellahanka Division
Job No	MCTPL/BBMP/Project Division Yelahanka ZONE /P-7/1/2017-2018
Mix Type	Wet Mix Macadam
Contractor	Sri. R. Satheesh
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works,
Location	bay
Material	Coarse Aggregates
Sample No	14
Date	1-Apr-2018

Test Hole No	**14**
MDD	2.24
OMC in %	3.20
Bulk Density Ys	1.39
Weight of Sand In cone W1 (gm)	1195.00
Weight Of Wet soil From Hole (W2)	4331.00
Wt Of Sand +Cylinder Before Pouring (W3)gm	17000.00
Wt Of Sand +Cylinder After Pouring (W4) gm	13167.00
Wt Of Sand In Hole: W5 = W3 - W4- W1 (gm)	2638.00
Volume of Hole: V= W5/ Ys	1895.11
Bulk Density Yb= W2/V (gm/cc)	2.29
Moisture Meter Reading (%)	1.61
Moisture Content : w (From Graph In %)	3.11
Dry Density Yd = Yb/(1+W/100)	2.22
Field Compaction(%)	98.95

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Field Density Test by Sand Replacement Method

Project Name	Improvements of roads for layout where the Cauvery and UGD works are in progress in Ward No.05 and Ward No.06 Byatarayanapura Sub Division
Client	Executive Engineer Project Yellahanka Division
Job No	MCTPL/BBMP/Project Division Yelahanka ZONE /P-7/1/2017-2018
Mix Type	Wet Mix Macadam
Contractor	Sri. R. Satheesh
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works,
Location	bay
Material	Wet Mix Macadam
Sample No	15
Date	3-Apr-2018

Test Hole No	15
MDD	2.24
OMC in %	3.20
Bulk Density Ys	1.39
Weight of Sand In cone W1 (gm)	1195.00
Weight Of Wet soil From Hole (W2)	4437.00
Wt Of Sand +Cylinder Before Pouring (W3)gm	17000.00
Wt Of Sand +Cylinder After Pouring (W4) gm	13107.00
Wt Of Sand In Hole: W5 = W3 - W4- W1 (gm)	2698.00
Volume of Hole: V= W5/ Ys	1938.22
Bulk Density Yb= W2/V (gm/cc)	2.29
Moisture Meter Reading (%)	1.57
Moisture Content : w (From Graph In %)	3.32
Dry Density Yd = Yb/(1+W/100)	2.22
Field Compaction(%)	98.91

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Test Report

Field Density Test by Sand Replacement Method

Project Name	Improvements of roads for layout where the Cauvery and UGD works are in progress in Ward No.05 and Ward No.06 Byatarayanapura Sub Division
Client	Executive Engineer Project Yellahanka Division
Job No	MCTPL/BBMP/Project Division Yelahanka ZONE /P-7/1/2017-2018
Mix Type	Wet Mix Macadam
Contractor	Sri. R. Satheesh
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works,
Location	bay
Material	Wet Mix Macadam
Sample No	16
Date	3-Apr-2018

Test Hole No	16
MDD	2.24
OMC in %	3.20
Bulk Density Ys	1.39
Weight of Sand In cone W1 (gm)	1195.00
Weight Of Wet soil From Hole (W2)	4441.00
Wt Of Sand +Cylinder Before Pouring (W3)gm	17000.00
Wt Of Sand +Cylinder After Pouring (W4) gm	13109.00
Wt Of Sand In Hole: W5 = W3 - W4- W1 (gm)	2696.00
Volume of Hole: V= W5/ Ys	1936.78
Bulk Density Yb= W2/V (gm/cc)	2.29
Moisture Meter Reading (%)	1.55
Moisture Content : w (From Graph In %)	3.53
Dry Density Yd = Yb/(1+W/100)	2.21
Field Compaction(%)	98.87

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